

★MATJ

X25 X27

97-522573/48

★JP 09250449-A

Vibration type compressor in refrigerator - has control device which controls inverter circuit to increase or decrease output voltage according to composed top dead point position

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The compressor (10) is provided with a displacement detector (21) connected to a piston (14) in the axial direction of a cylinder (11). The cylinder is provided with an intake valve (15) and a discharge valve (16). A permanent magnet (12) is arranged in the inner peripheral surface of the cylinder. A coil (13) which acts on the magnet is connected with the piston and moves along with the piston in the axial direction of the cylinder. A coupled of resonating openings (20) are coupled with the piston. A converter circuit (23) converts the AC electric power into the DC electric power. An inverter circuit (25) consisting of a number of switching transistors converts the DC electric power into the AC electric power and applies the voltage to the coil.

A top dead point position calculator (28) calculates the top dead point position of the piston from the piston position signal from the displacement detector. A top dead point position comparison device (29) is provided which outputs the comparison signal according to the difference of the detected top dead point position with the predetermined reference value of the top dead point position.

A control device (A) increases the output voltage of the inverter circuit more than the preset standard voltage output, when the detected position of the dead point is below the reference position and decreases the output voltage below the preset standard voltage out when detected position of the top dead point is above the reference position.

ADVANTAGE - Prevents damage to valve by over stroke of piston. Improves cooling performance of refrigerator. (14pp Dwg.No.1/13)

N97-435246

X25-L03B X27-F02C1

- 10 振動型圧縮機
- 11 シリンダ
- 12 永久磁石
- 13 環状コイル
- 14 ピストン
- 15 吸入弁
- 16 吐出弁
- 20 共振パネ
- 21 変位検知器

